DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/Ala Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-016326 Address: 333 Burma Road **Date Inspected:** 14-Aug-2010

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: See below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Tower Components

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance Inspector (QA Inspector) George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 11

This QA Inspector randomly observed the following work in progress in Bay 11:

SMAW welding of weld joint WSD1-TL5-4B/F-8 located on PCMK west tower, lift 5, external connection plate to skin E. Alternating welders were identified as 066418, 066763. QC was identified as ZPMC CWI Ye Yong Jun (QC1). Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Shao Hai Lang (QCA1), who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-T-3213-TC-U4c.

SMAW welding of weld joint WSD1-TL5-4B/F-7 located on PCMK west tower, lift 5, external connection plate to skin E. Alternating welders were identified as 066398, 066401. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA1, who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-T-3213-TC-U4c.

SMAW welding of weld joint WSD1-TL5-4B/F-16B located on PCMK west tower, lift 5, connection plates. Alternating welders were identified as 037998, 037779. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA1, who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-T-3213-TC-U5b.

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SMAW welding of weld joint WSD1-TL5-4B/F-16A located on PCMK west tower, lift 5, connection plates. Alternating welders were identified as 037780, 037743. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA1, who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-T-3213-TC-U5b.

SMAW welding of weld joint ESD1-TL5-2B/F-10 located on PCMK east tower, lift 5, internal connection plate to skin E. Alternating welders were identified as 046704, 040656. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA1, who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-T-3213-TC-U4c.

SMAW welding of weld joint ESD1-TL5-2B/F-5B located on PCMK east tower, lift 5, internal connection plates. Alternating welders were identified as 040690, 054460. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA1, who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-T-3213-TC-U5b.

SMAW welding of weld joint ESD1-TL5-2B/F-41 located on PCMK east tower, lift 5, external connection plate to skin E. Welder was identified as 040614. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA1, who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-T-3213-TC-U4c.

Bay 10

This QA Inspector randomly observed the following work in progress in Bay 10:

SMAW repair welding of weld joint SSD1-TL5-1F-F-18B located on PCMK south tower, lift 5, internal connection plates. Alternating welders were identified as 052493, 053049. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Yu Zhi Li (QCA2), who was not a CWI. Welding variables recorded by QCA2 appeared to comply with WPS-485-SMAW-3F(3G)-repair as displayed on ZPMC Weld Repair Report T-WR3486. See photo below.

SMAW welding of weld joint SSD1-TL5-1B-F-5B located on PCMK south tower, lift 5, internal connection plate to skin A. Alternating welders were identified as 056200, 052930. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA2, who was not a CWI. Welding variables recorded by QCA2 appeared to comply with WPS-B-T-3313-TC-U5b.

SMAW welding of weld joint NSD1-TL5-3E-F-11, 12 located on PCMK north tower, lift 5, connection plates. Alternating welders on both welds were identified as 037840, 066361, 037996. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA2, who was not a CWI. Welding variables recorded by QCA2 appeared to comply with WPS-B-T-3213-TC-U4c.

SMAW welding of weld joint NSD1-TL5-3F-F-18 located on PCMK north tower, lift 5, connection plates. Alternating welders on both welds were identified as 067558, 070432. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA2, who was not a CWI. Welding variables recorded by QCA2 appeared to comply with WPS-B-T-3313-TC-P5.

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SMAW welding of weld joint NSD1-TL5-3B-F-12 located on PCMK north tower, lift 5, internal connection plate to skin B. Welder was identified as 067656. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA2, who was not a CWI. Welding variables recorded by QCA appeared to comply with WPS-B-T-3313-TC-U5b. This weld joint has been modified to a different weld configuration. See this QA Inspector's report of 8/11/10 for more information.

Heavy Dock

This QA Inspector randomly observed the following work being performed on the Heavy Dock:

This QA Inspector observed no apparent work was being performed on the Heavy Dock. All 4 tower lift's 3 were connected and positioned vertically on a base pedestal at end of the heavy dock. East and south tower lift's 2 were positioned horizontally on stanchions on the deck at the end of the Heavy Dock. The ZPMC 2200 ton floating crane was moored to the end of the Heavy Dock and sitting idle.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

No significant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Micheal Ng, 159-2184-5703, who represents the Office of Structural Materials for your project.

Inspected By:	Goulet,George	Quality Assurance Inspector
Reviewed By:	Dawson, Paul	QA Reviewer